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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,611	10/14/2003	Irene Lin	5124-00006	2610
26753	7590	09/26/2005	EXAMINER	
ANDRUS, SCEALES, STARKE & SAWALL, LLP 100 EAST WISCONSIN AVENUE, SUITE 1100 MILWAUKEE, WI 53202			MUSSER, BARBARA J	
			ART UNIT	PAPER NUMBER

1733

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/605,611

Applicant(s)

LIN, IRENE

Examiner

Barbara J. Musser

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/3/05, 3/24/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, it is unclear what is meant by "normally substantially closed" and how this varies from "substantially closed" or "normally closed". For the purposes of examination this is assumed to mean that the gaps must be closed at least most of the time but can be closed all of the time. It is unclear what is required by "polymer composite" in light of the disclosure, paragraph [0026], which discloses the polymer composite to be polymeric materials which are free of any additives such as oxygen scavengers. It is unclear if this requires a polymer, a polymer mixed with other materials, or multiple layers of polymer. For the purposes of examination, this is assumed to mean either a polymer mixed with another material, or multiple layers of polymer.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11, 12, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kagawa(U.S. Patent 5,458,951) in view of Bell(U.S. Patent 4,986,673) and Speer et al.(U.S. Patent 5,811,027).

Kagawa discloses forming an air-permeable film by pressing indentations into a film.(Col. 2, ll. 44-55) The indentations do not extend through the film. The reference discloses the film can be made into a bag but does not disclose how this is done.(Col. 6, ll. 22-24) Bell discloses that storage bags are conventionally formed by sealing together two panels along three edges, leaving the fourth open for insertion of articles.(Col. 2, ll. 49-55) It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the film of Kagawa into a bag by sealing together two panels of the film on three edges forming a pocket since Bell discloses this is a well-known and conventional method of forming a storage bag.(Col. 1, ll. 49-55)

The references cited do not disclose the polymer being a composite. Speer et al. discloses mixing an oxygen scavenger into a packaging structure to maintain a low level of oxygen in the package.(Col. 1, ll. 29-51) It would have been obvious to one of ordinary skill in the art at the time the invention was made to mix the polymer forming the air-permeable film of Kagawa and Bell with an oxygen scavenger to prevent the spoilage of the contents of the package.

Regarding claim 12, Kagawa discloses the film can be made of two layers, the inner one of which can be polyethylene.(Col. 4, ll. 65- Col. 6, ll. 5, 22-25) Polyethylene is a heat-sealing material.

Regarding claim 16, Kagawa discloses the layers can be polyethylene and polyethylene terephthalate.(Col. 5, ll. 65- Col. 6, ll. 6)

Regarding claim 18, while the references do not disclose a bag with curved sides, such are a well-known alternative to rectangular bags. It would have been obvious to one of ordinary skill in the art at the time the invention was made to seal a curved edge to form the bag since bags with curved edges are well-known alternatives to bags with rectangular shapes.

Regarding claim 19, since the sealing occurs via heat sealing(Bell, Col. 7, ll. 50-53),one in the art would understand that a heating process that activates the heat-sealable layer occurs.

Regarding claim 20, Bell discloses that bags conventionally have a ziplock.(Col. 2, ll. 1-4)

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kagawa, Bell, and Speer et al. as applied to claim 12 above, and further in view of Komatsu et al.(U.S. Patent 4,657,610).

The references cited above do not disclose a second heat-sealable layer of the opposite side of the film from the first. Komatsu et al. discloses two heat-sealable layers on either side of the film, one to seal the film closed and the other to seal it to an other cover.(Col. 3, ll. 31-33; Figure 1) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a second heat-sealable layer to the film on the opposite side from the first since this would allow the film to be bonded to a cover film as well as bonding the film to itself to form a bag.(Col. 3, ll. 31-33) The

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reference discloses the second heat-sealable film is extrusion laminated to the film.(Col. 4, ll. 52-54) This is considered a type of hot coating. Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the second heat sealable material on the film since Komatsu et al. discloses the first heat-sealable layer is coated(Col. 3, ll. 46-48) or adhered, clearly indicating that lamination and coating are well-known alternatives in the art.(Col. 3, ll. 46-38)

6. Claims 11, 12, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell in view of Yoichiro et al.(JP10-200659), Kagawa(U.S. Patent 5,458,951), and Speer et al.

Bell discloses that conventionally bags are formed by laminating together two panels made of polyester laminated polyolefin films which are sealed around the edges(Col. 7, ll. 38-57; Figure 1) leaving one edge open for material to be inserted.(Col. 2, ll. 50-55) The reference does not disclose the bag being air permeable. Yoichiro et al. discloses making a packaging material which can release internal pressure by forming slits in the non-heat-seal film(2)(Abstract). Kagawa discloses that these type of slits make a bag porous, i.e. air-permeable.(Col. 1, ll. 34-40) It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the bag of Bell capable of releasing internal pressure as taught by Yoichiro et al. since this would prevent the bag from exploding in the microwave, and that this would effectively form an air-permeable bag since Kagawa discloses these type of slits make a bag air-permeable.(Col. 1, ll. 34-40) While Yoichiro et al does not disclose how the slits are formed, Kagawa discloses forming slits via perforation or needle punching.(Col. 1, ll. 34-

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40) Since applicant's impression process forms slits through the material via perforation, the slit cutter of Kagawa et al. is considered to also be an impression process.

The references cited do not disclose the polymer being a composite. Speer et al. discloses mixing an oxygen scavenger into a packaging structure to maintain a low level of oxygen in the package.(Col. 1, ll. 29-51) It would have been obvious to one of ordinary skill in the art at the time the invention was made to mix the polymer forming the air-permeable film of Bell, Yoichiro et al., and Kagawa with an oxygen scavenger to prevent the spoilage of the contents of the package.

Regarding claim 12, Bell discloses a heat-sealable(polyethylene) layer.(Col. 7, ll. 46-47)

Regarding claim 16, Bell discloses the layers can be polyethylene and polyester.(Col. 7, ll. 46-47)

Regarding claim 18, while the references do not disclose a bag with curved sides, such are a well-known alternative to rectangular bags. It would have been obvious to one of ordinary skill in the art at the time the invention was made to seal a curved edge to form the bag since bags with curved edges are well-known alternatives to bags with rectangular shapes.

Regarding claim 19, since the sealing occurs via heat sealing(Bell, Col. 7, ll. 50-53),one in the art would understand that a heating process that activates the heat-sealable layer occurs.



Regarding claim 20, Bell discloses that bags conventionally have a ziplock.(Col. 2, ll. 1-4)

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell, Yoichiro et al., Kagawa, and Speer et al. as applied to claims 11 and 12 above, and further in view of Kai et al.(U.S. Patent 5,141,795).

The references cited above do not disclose the sealing layer filling the gaps in the film to prevent air permeation. Kai et al. discloses that forming a heat-sealable layer on the perforated film closes the gaps in the film and fills them.(Col. 6, ll. 11-20) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the heat-sealable layer to the film after perforating it since this would fill the gaps in the film preventing direct air passages into the interior of the package.(Col. 6, ll. 11-20)

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bell, Yoichiro et al., Kagawa, and Speer et al. as applied to claim 12 above, and further in view of Komatsu et al.(U.S. Patent 4,657,610).

The references cited above do not disclose a second heat-sealable layer of the opposite side of the film from the first. Komatsu et al. discloses two heat-sealable layers on either side of the film, one to seal the film closed and the other to seal it to an other cover.(Col. 3, ll. 31-33; Figure 1) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a second heat-sealable layer to the film on the opposite side from the first since this would allow the film to be bonded to a cover film as well as bonding the film to itself to form a bag.(Col. 3, ll. 31-33) The



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reference discloses the second heat-sealable film is extrusion laminated to the film.(Col. 4, ll. 52-54) This is considered a type of hot coating. Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the second heat sealable material on the film since Komatsu et al. discloses the first heat-sealable layer is coated(Col. 3, ll. 46-48) or adhered, clearly indicating that lamination and coating are well-known alternatives in the art.(Col. 3, ll. 46-38)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dunn can be reached on (571)-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*HJM*  
*BJM*

  
**JIANCHUN YAO**  
**ATTORNEY EXAMINER**